

## Non Point Source Management Program :: Construction

Nonpoint source pollution from erosion and sedimentation is the number one pollutant of North Carolina waterways. Construction and grading activities play a major role in this phenomenon by increasing the sediment load in runoff. Construction activities expose many thousands of acres of soil each year in North Carolina. The clearing of land for highways, homes, office buildings, and shopping centers leaves the exposed soil vulnerable to erosion from rainfall. During storms, rainfall dislodges soil particles than can be carried to nearby streams. Too much of this soil in streams, rivers, lakes and estuaries can ruin the aquatic environment, eliminate fish populations, increase

stream flooding and reduce storage capacity of reservoirs.

Research in Piedmont North Carolina has found that erosion rates at construction sites can range from 10.1 tons per acre/year (Line et al., 1999) to 188 tons per acre per year (Athayde, 1977). Such significant discrepancy between these numbers might be attributed to the annual rainfall variations, and differences in soil characteristics, slope and management practices. This compares to erosion from undisturbed natural

systems that have been measured at 0.1-0.2 tons/ac-year (Brady and Weil, 1996). In any case, these data show that construction can contribute huge amounts of sediment to our waterways if not properly managed.

Given the key contribution that construction activities make to  $\ensuremath{\mathsf{NPS}}$ 

pollution in North Carolina, it is imperative that such land disturbing activities as construction implement best management practices to reduce erosion and prevent sedimentation. The Division of Land Resources, Land Quality Section, under the Sedimentation Pollution Control Act (SPCA) of 1973 regulates all construction activities in North Carolina that disturb more than one acre of land. The Land Quality Section requires certain standards to be met on construction sites based on its rules under the 1973 SPCA, [15A NCAC 4A



through 4E]. The Section also delegates these responsibilities to local governments that meet minimum criteria for assuming the program.

Information is available at <a href="http://www.dlr.enr.state.nc.us/">http://www.dlr.enr.state.nc.us/</a>. Also, the Section has set up a toll-free hotline for citizens to report possible violations to the Sedimentation Pollution Control Act: 1-866-STOPMUD (786-7683).

## **Construction Links**

## **Regulatory Agencies**

• NC Division of Land Resources - Land Quality Section